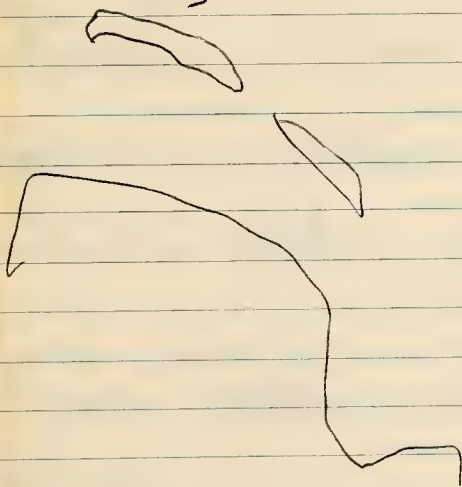


7530-222-3521
FEDERAL SUPPLY SERVICE
(GPO)



JAPAN



On road north to Moscow from Anzisk
M-2

Melampyrum cf. nemorosum in border
Scrophulariaceae also *hemiparasit*

Woods w. *Betula*.

~~Woods~~ Norway Spruce area.

Batum

7/12/75

adjacent republic of Islamic part of
S. Georgia people are the same as Georgian

Polone

Magnolia grandiflora

Cedrus - deodora

Prunus better fruits.

Batum M.L.

Phytolacca americana adv.

Polypodium polifolium adventum

Clerodendron fruticosum adventum

Quercus imbricata w. Caucasus

Paspalum dilatatum weed-grass

Lepidium

Black Locust

Compositae cf. radicans Beyer. like Gr. Oak
Orange Fl.

Castanea sp.

Carpinus Caucasica
Hart's Tongue Fern.

Rhus w. pinnatifid leaves
Sambucus sp.

Lonicera (Prunus)

Ulex *negundo* exotic

Butea capitata (~~not~~ Pennant. Palm)

Desmodium *lotus*

Robinia pseudoacacia

Paepalium digitaria

Cynodon.

Botanical Garden

Cryptomeria

Hortensia

Rhamnus

Cupressus lusitanica Mexico, Guatemala

Phyllites scolopendrium

adder's tongue Fern

Quercus rubra

Alderia polycarpa

Tree 70'

Leaves spiral crowded
toward end of twigs

Apical bud large.

Barb: not furrowed, ten
marked by horizontal lines
& round pit



Aleurites Pf.

Cinnamomum glanduliferum

3' dbh

70'

India & China

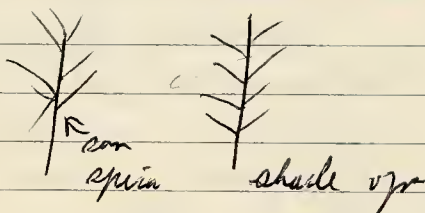
Ficus concolor

Oleaceae *Oremanthus aquifolium*
Like a large Elm

Cephalotaxus

2 forms of leaves on 1 plant.

Leaves spiral in sun
detachably opp in shade



Prunella orientalis *Cassia*
abies douglasii "

Pr. *Prunella orientalis* st.
abies douglasii leaf.
Fachycarpus ~~sp.~~ fortunei
Hollyhock.

New Zealand
Pittosporum terrefolium
P- *undulatum*

Hovenia dulcis Pf. R. homnaria
Thousands of Bees.

Podocarpus tauctora N. Z. exul.
does not flower

Halestemon lanceolatus N. Z. exul.

Cordyline *tilly lita*

La Blagayctus
tree.

~~*Furcraea*~~

Furcraea tenax New Zealand

Phytolobus pubescens

Callistemon in fruit N. Z. exul.

Juglans manschurica abnormal
stays teeth medicinal

Aleurites *fraxi*

Trigonostemon *gibb.*
below black. M. not found
in fossils.

Beschofia trifoliata

Paulownia fortunei

Ehretia corylifolia } ^{Jap}
magnifolia } Burayenack.

Cocculus

Linidern *communis* Japan

Corylopsis

Castanea mollissima

Xylocarpus molle

Flaccid

pinnate serrate lvs.

(Theod or V) basal.

2° at base & then abov.

Cotoneaster japonicus

Ailanthus mollissima

freq. 2 glands on

each side on v

base, side of leaf

Dillenia sinensis shrubby or vint.

Daphniphyllum like laurel
whole leaf.

Cudrania tricuspidata
fam. ~~to~~ Moraceae

Abelia guineae

Rhus javanica py. - winged pet.
w. Borneo

Scutya subtile

Zalacca acuminata

name in *Zalacca Hesperis*

taken by Luteus as *Zalacca*

Thyopsis

Cornus controversa var. *Collinensis*

Podocarpus naga

Gardenia cf. rubra

Symplocos variegata. py

Magnolia glandulata

Pterocarya hispida or *stellata*
huai

Corylus willana

Liriodendron chinensis

Laurocerasus officinalis

Arum albrispatum
Osmunda regalis
Pterocarya pterocarya Michx.
near strait

Pumila megaseipolia Borasul Bat.
Hawaii and group
w/ *Hymenophyllum thunbergense*

Rhododendron ponticum
Epimedium
~~*Cassia*~~ ^{*prunum*} *strictius* Boissac
non possible remnant of ancient
Cultivation w/ *Acropetalon* of

Buxus ~~to~~ *Caucasum*
albenzia
Hypophyllum rhamnoides L.
Elaeagnus

Amc.
Berberis vulgaris native
Emp. I no strait 21²
w small 20^m
Buxus colchica

Ulex Colchici

Pterocarya pterocarpus
streamside tree 60'
w/ fruits.

A Rhododendron ponticum bell.

Laurus baccata

once fructs

Acer reticulatum

good (E) teeth.

Acer platanoides

Corylus maxima

S. Europe

Ficus Colchica

Mespilus germanica

Dryopteris ~~frondosa~~ botteri

Athyrium

Dryopteris medieterranea

Quercus imbricata

leaf white oak leaf w/ lvs &
almost as white

Quercus lutea

Tilia caucasica

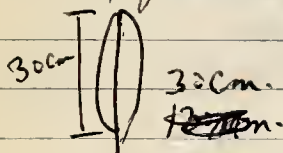
Tilia caucasica

Cardamine

Asterina subita

Quercus ibérica var. *thunbergii*
deciduous about 2000 m.

Q. pontica



19 sp of *Dalys* in Caucasus.
2- dist in Transcaucasus
Q. robur.

* 17 sp Only in Caucasus

~~7-14 in lobes~~

lobed
leaves.

- Q. imbricata* | lowlands
- Q. longyria* | 200-500 meters
- Q. longyria*
- Q. humilis*
- Q. macrolobata* - 2000 m.
- Q. pubescens* - 2000 m.
- Q. trichocarpa* 1000 m.
- Q. ibérica adhaerens*.

Q. castaneifolia - small open.

Q. pontica ~~etc. etc.~~

~~lobed~~
~~leaves green in winter~~

Fagus orientalis

Quercus pontica

~~the~~ huge fagus
trunks reach 12 m. circumference
because of snow
above 2000 feet.
grows in clearings.

Quercus myrsinifolia

~~little a tree~~

Japan by tree

semi-ring

Huge tree of Caucasus

Huge Relictites Cold's fossil

Pterocarya steinocarya
Farhad USSR

Cactinopsis

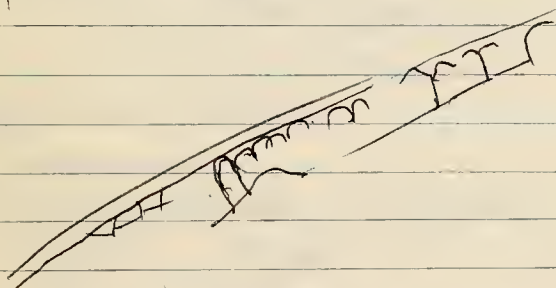
Passania cuspidata China Japan

Taxodium mucronatum

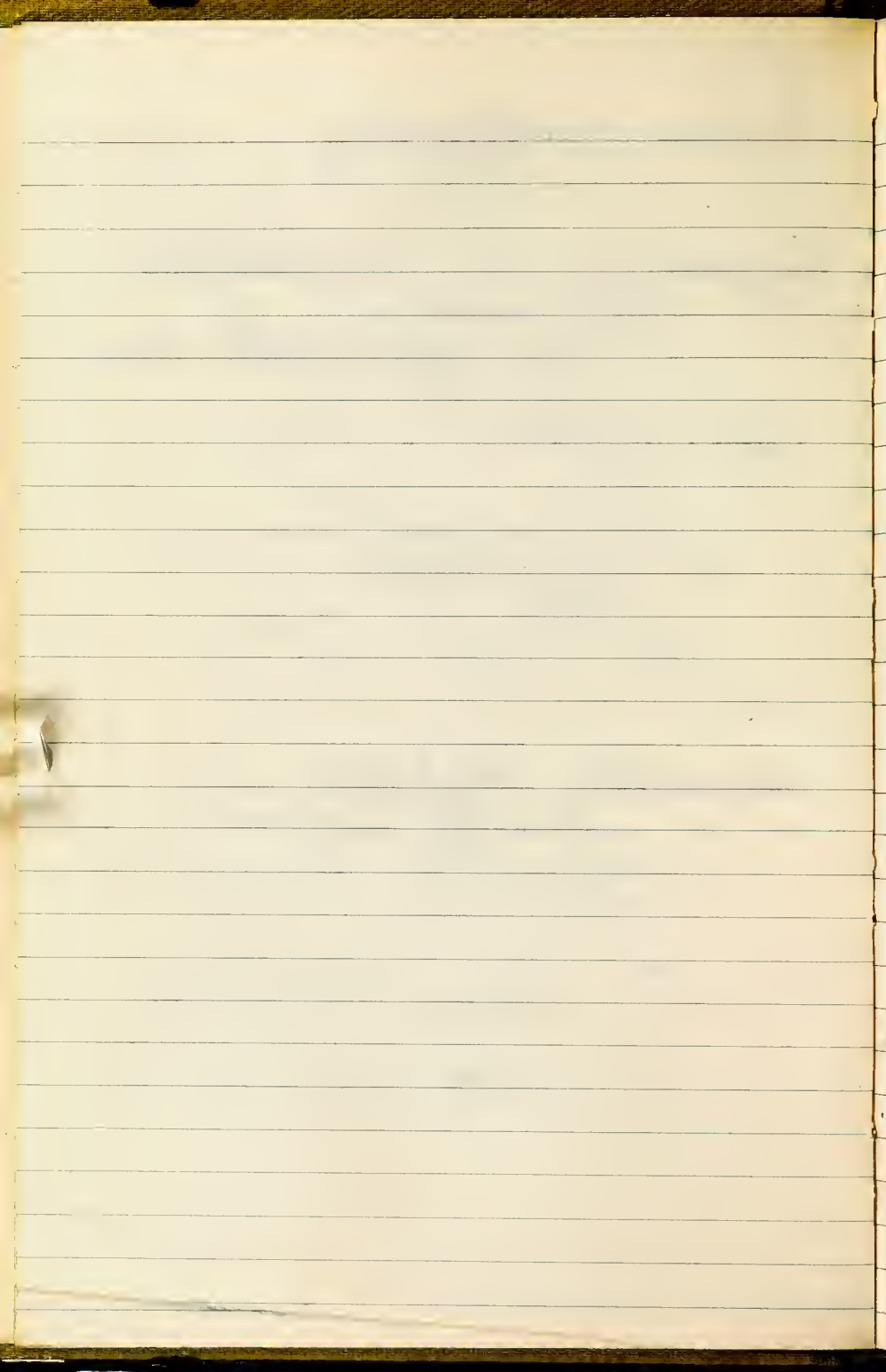
Quercus castanaefolia
Med. 21

Eryngium globe thistle Umbelliferae
w yucca like leaves

Quercus acuta



Calycanthus occidentalis
from the California.



July 14,

TRIP TO MT. MITRALA

STOP #1 Kirala

460 m

~~550~~

Cultivated plants

Began to plant cult. plants here in 1916-

Pinus strobus

almanni

Abies almanni

Planted at 1000-2000 m.

Quercus falcata

Lindendrum

Pseudopseudotsuga douglasii

Metc. glypt.

Juniperus canari

Pinus excelsa

strobus

Q. palustris

dates.

A 15^{Hester} Hester plot. all exotics

Local forest was composed of trees yielding
only liquor 300 m² wood / hectare
The balance of empty of evergreen shrubs
Juglans regia
2 others

A. bracon nordmanni

2200 m. St. Tumbuk
~~St. Tumbuk~~

0.

Saw at 3 top 1

Alnus barbata

STOP #2 540
~~900~~ m.

CASTANEA FOREST
V FAGUS ORIENTALIS BY of
alnus barbata room

Mixed forest below this
material always covered w clouds in ~~sun~~
Mixed. Causasian Forest. not fruiting

Cost. sativa Sea Level to 800 m (1000 m)
seen in Caucasus it is the dom.
tree of fow. mainly in West Cas

Chestnut is gone 500-800 m.

higher & only isolated
Calcareous soils only oaks

Taxus baccata west Europe

Forms groves in W. Caucasus
Also Rhododendron park

East Georgia. Groves of Abazyan B.
700 hectares Largest grove in W.

Height 25-30 m. - 125-130 cm dbh

Armenian grove 25 hectares

Azerbaijan 2 Hectares

S. Caucasus goes down to 500 - 1200 m

Isolated large trees

Shrubs 20-30
alt 40

(Alnus barbata
Corylus caucasica)

tree species
in this zone
~~the~~

Herbets. Here of
B. ponticum
Laurocrassus ff.

Herb cover poor because of shade.

Hedera colchica
R. Fagus orientalis.

In shaded areas forest 20-30 herbs

Periploca grisea

Gentian

Stop # 3 Stream 800m

Gentiana cyrtocalyx
Heracleum
Laurucerasus

Herbaceous Flon.

not in mycor understory
only along streams & margins of

Clas. Telechia

Fuchystemon ovata ^{Comp.} ^{Burr} large round-le

Heracleum rasnovit

Gentiana cyrtocalyx

Auroneus raryub

Campanula lat. lactiflora

Hypochaeris lupulorum

Walleriana arabicifolia

Chrys. perdue

Cardamine pederata

Saxifraga cymbalata

Pedicularis hirta

Stachys raphanifera

Lympathis rotundifolia

Salsola glabra

Pf of Campanula lactiflora

Sanicula europaea
Vaccinium arctostaphylos
Thalictrum ovifolium
Panrunculus
Festuca ovinalis
Festuca minor
†
* *Ruscus Colchica*
Alex colchicum

Kalla to Stop 5.

Sorbus brissera
Rhododendron smurnovii
Fomentosa l.

Fraxinus alnus Rhamnus
Rhamnus frax.

Vaccinium arctostaphylos

Ulex. Colchica

Fagus orient w Hedera colchica
2 ft

Picea orientalis 1 ft

Rhod. parviflora the Fag. orient 1 ft

Rhod. luteum

Blechnum spicant

A Burned over area
undershrubs Rhodo
Vacc.

Berberis nana in clu

Epilobium pumophyllum

Ulex imbricaria



100 The Lake

Beach - forest.

Phlebotomus oxypus

N. Pont

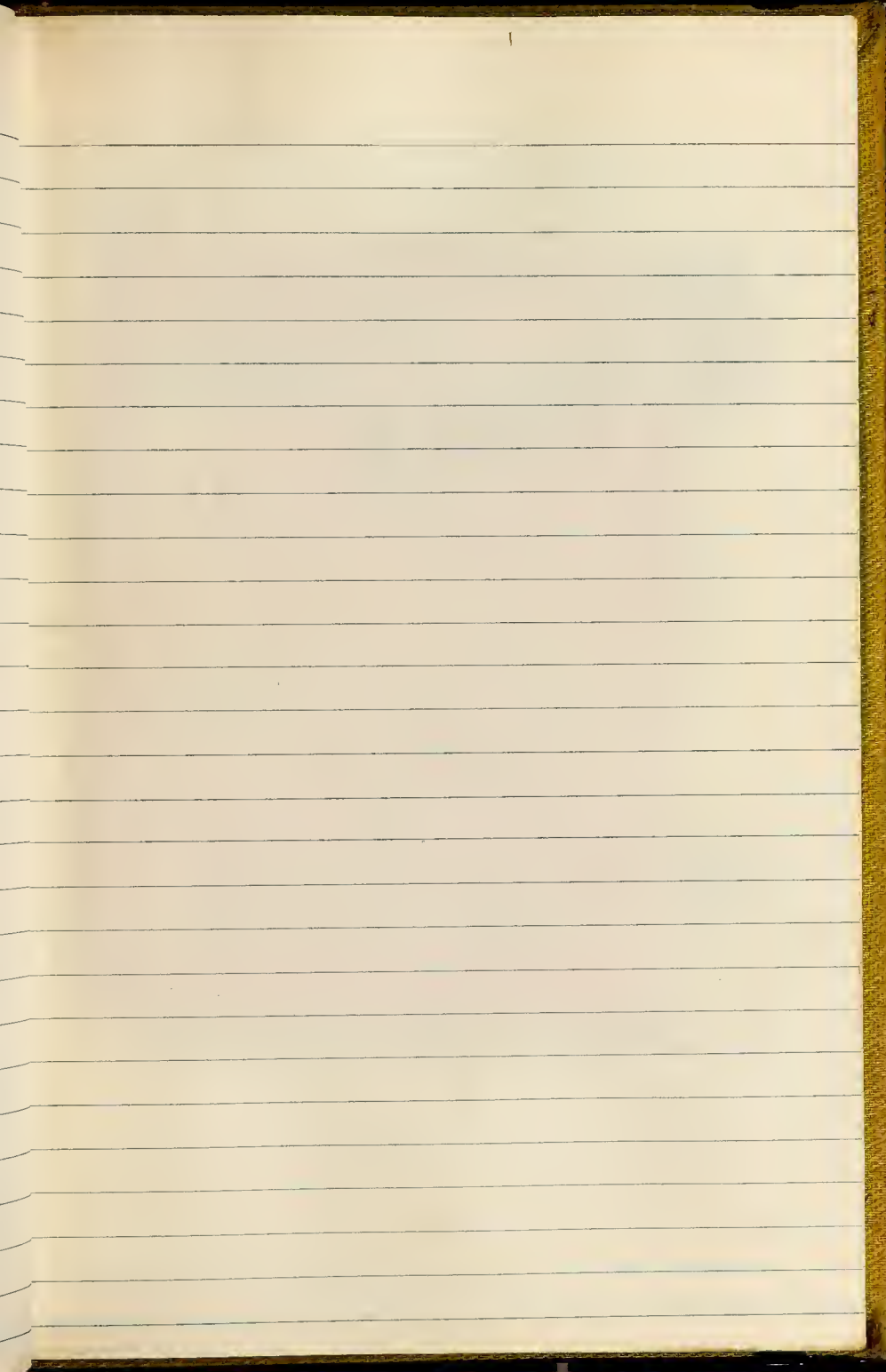
Beach

Alone.

Paris ~~on~~ incomplete

the *de olua* restricted
a trillion analogue









სვანური

НАТУРАЛЬНО - ПОЛУСЛАДКОЕ

Хванчкара



САМТРЕСТ

ნა ბი 1 ვ. 58

ტექნიკა

კრედიტი 10.5-12

ქ



ქ

Sweet spirit rec.

117515

MA BIN 1 P. 55 X MAMI EPYKAMHOH GCP TQCT 5590-70

САНПЕКТ

ТЕНДЕНД



КРЕН. 10.5-12.5 од %

БЕНОЕ

EMK. 0.7 A TADON

ЉУНАЖАНИ ЉУНАЖАНИ



ЉУНАЖАНИ

John
Burgess

575

ГРУЗИНСКОЕ ВИНО



სუკუზანი
МУКУЗАНИ

КРЕП. 10,5-12,5 °св%

КРАСНОЕ

ЕМК. 0,7 л.



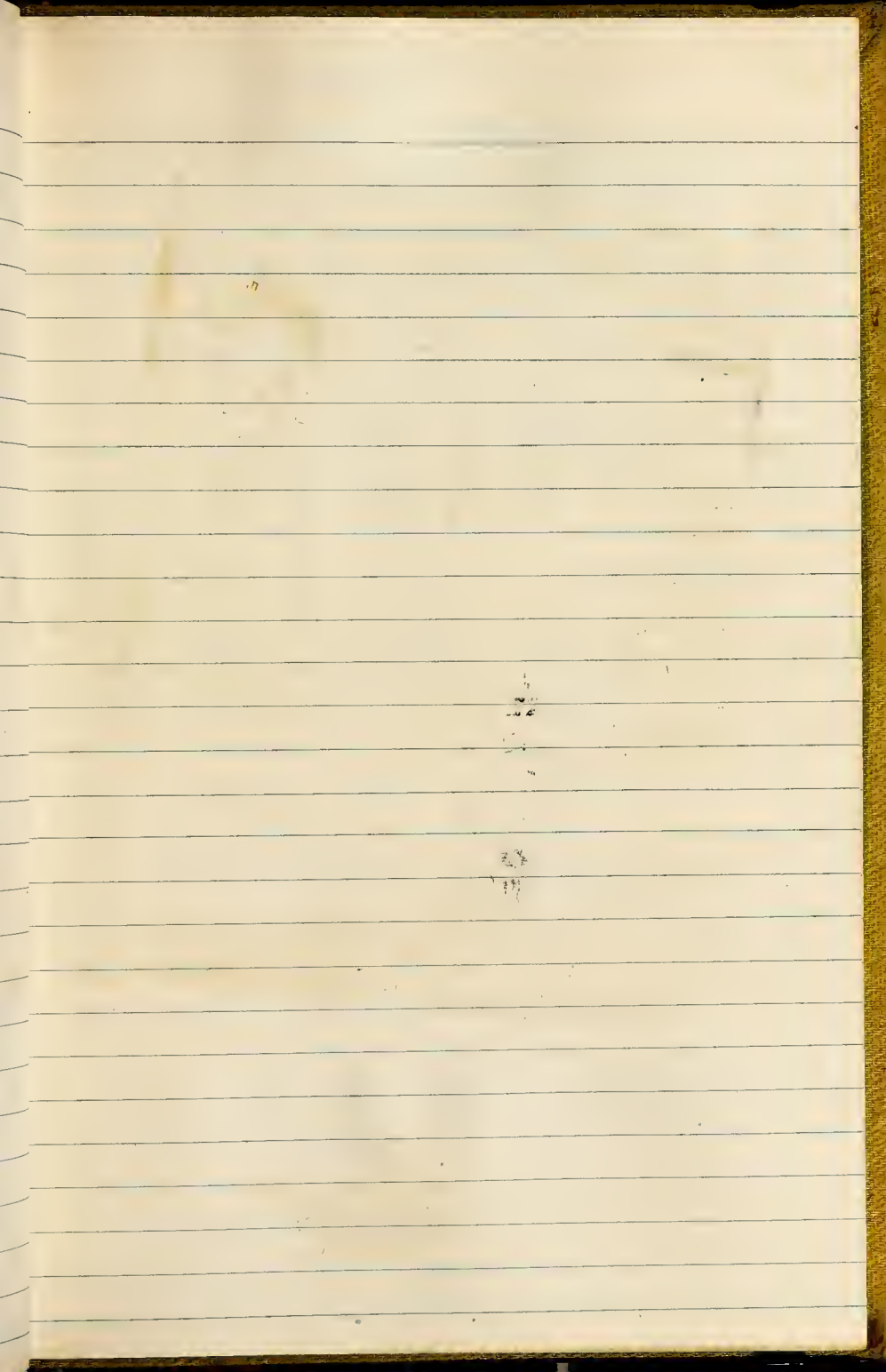
ТБИЛИСИ

САМТРЕСТ

ВИНЗАВОД №1

МПП ГРУЗИНСКОЙ ССР







Vincennes



July 15 Satyria

Rainfall Honey Area"
2200 mm

Subtropical Colchic Forests

All rest has gone to Sea level

Galium atractum

Carynus orientalis

Buxus colchica forming high ^{thru} ~~sea~~

Cornus mas

Fagus orientalis

Therococcus sp

Acer latum sp - rare tree

Hedera colchica

Smilax

Acer latum - ^{not} foot teeth on tree

5 lobes Bark like red maple

Myrica orientalis

Salix colchica

Hedera both sides white fl

Ulmus scaberrimus A

Quercus hirtelliana A

Succession to Decid.

Area to 10 meters

Rhododendron luteum
Viburnum opulus B
Castanea sativa A
Taxus baccata M
Euphorbia emegidloides
Huscus F. Ant. in
Ligustrum vulgare
Prunella
Yucca puberula
~~Et al. turca agropyrum ?~~

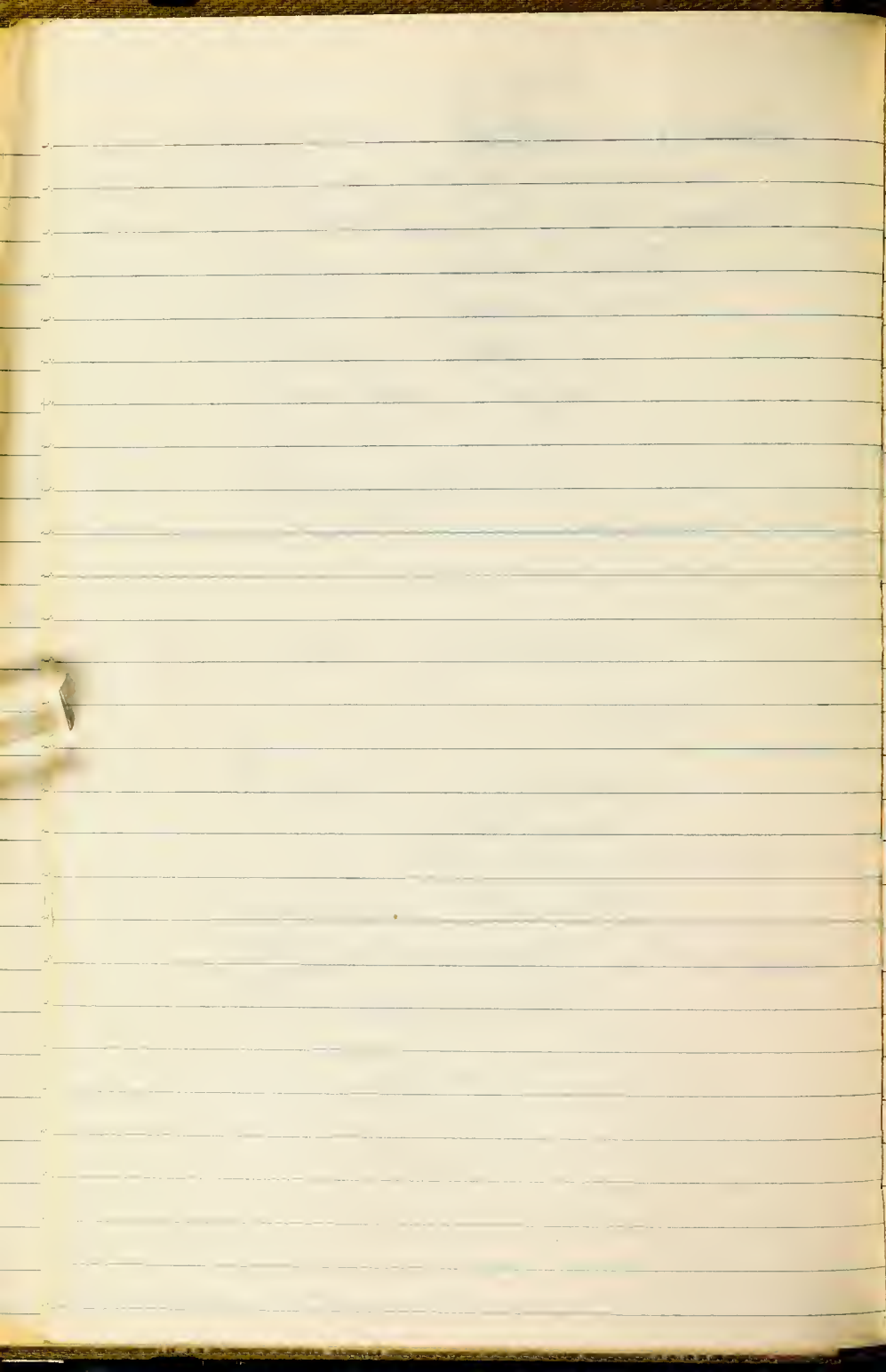
Open field Thymus
a legum.

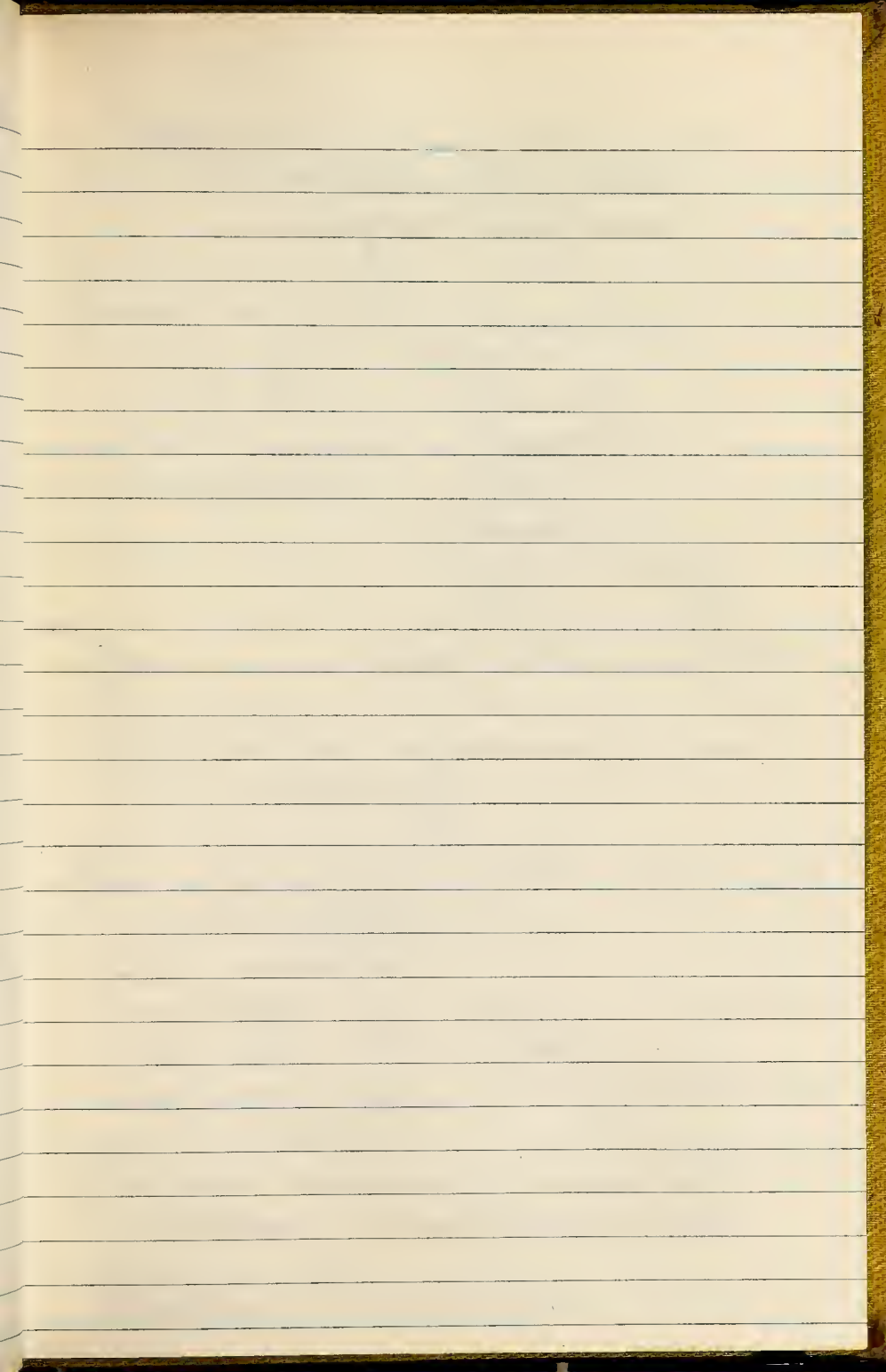
Penstemon
grecus
Apocynum

Impatiens
Pyrus caucasica
Ficus
L. corniculata

Prov. of
America America
Low plant to cover

~~Group~~ Casperias orient
Abera glab.
orient
& other.







July 16
Institute of Sea and
Subtropical Cultures

Founded in 1930

Sci Dept

non-sci

7 depts

Radiation

Dept of Irrigation
& Amelioration

Laboratory

Biochem

Phytopath

Agro technology

Agrochemistry

Agri

Dept of Plant Protection

Experiments in agrochemistry (fert.)
& agrotechnology

Efforts toward high yield & high quality
raw material

Sea introduction

New variety they are trying to introduce
will give 50-60% more yield

Biochemical Lab. - Prot. from disease &
insects

Have found some insect controls for
protection of subtropical pests.

Problems of Concentration

Protection of plants
Optimal nourishment
Agrotech. measures
Study of bot & physiol of plants
Application of isotopes

Restriction of old lands
Protection of Citrus from hot temp.
Research on mechanization &
 automanagement
Most land very steep does not allow
 machines

About 400 people
3 branches Agri Comprehensve Station
Covering all of the subtropical zone.

Rainfall 600-700 mm.
2200⁻²⁵⁰⁰ mm / year
Increase in yield 25%
In the mountain zone
500-600 mm.
Watering inc. yields 50%

Scrapie producer 95% of Ruasson
 Sea. 75% of subtropical
area & Sea

Tea Factory
connected to diesel.

Each open from April - October
Do several & much sorted
young tea - Matchless
Old - Gun.
2nd rolled

Tea sorted again by length
Then cut in cutter sep from stems

Instant tea powder used
to dye & enrich chocolate
Also add some hot juice to inst. tea
Just as per usual

withing
Tea leaves ^{wild} fermented at 38-40° C

12 tons tea / day / machine
For Green Tea only occurs after fermentation
FIXATION - 180° C enzymes are fixed
here, 5 minutes Then tea is

oxidized
Green tea fixed without pro

Rolling
Sorting
Fermentation

1 1/2 - 3 hrs
enzymatic change

Tea pictures

Const. of Medicinal Plants

Orthostemum stomareum Labata
Kidney drug

Vinca rosea ~~major~~? *Apocynaceae*
~~Cantharidin~~
Against cancer tumors

Asclepiadaceae

~~*Diphysa*~~ *fruticosa*
Gymnocarpus
Gymphostere Against Heart Disease

Kalindore penetrans *Crossulaceae*
Juice used for healing topical
ulcers

Alve - agra *Alve arborescens*
Stomach diseases
Topical use
Eye diseases after operation
HOOB tons

~~*Apocynaceae*~~
Bauhinia canescens / *sp.*
Atropis Skin, eye, stomach, etc.
10 *Alkaloids*

Passiflora incarnata
New disease

Eucalyptus 3 species
Antimicrobial
Long disease

Cephalanthus Ant. Malawi
rubrae

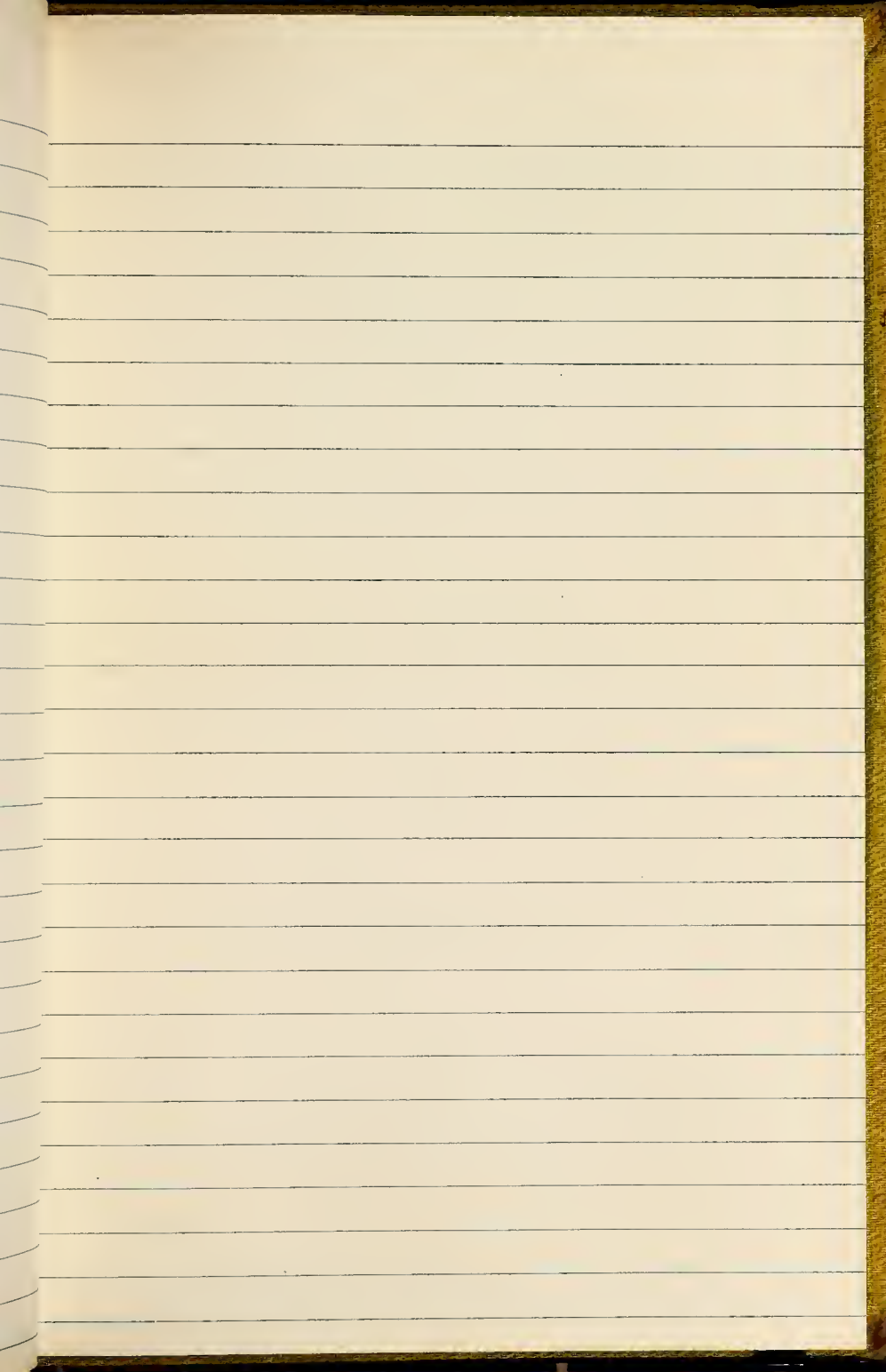
Rhus javanica

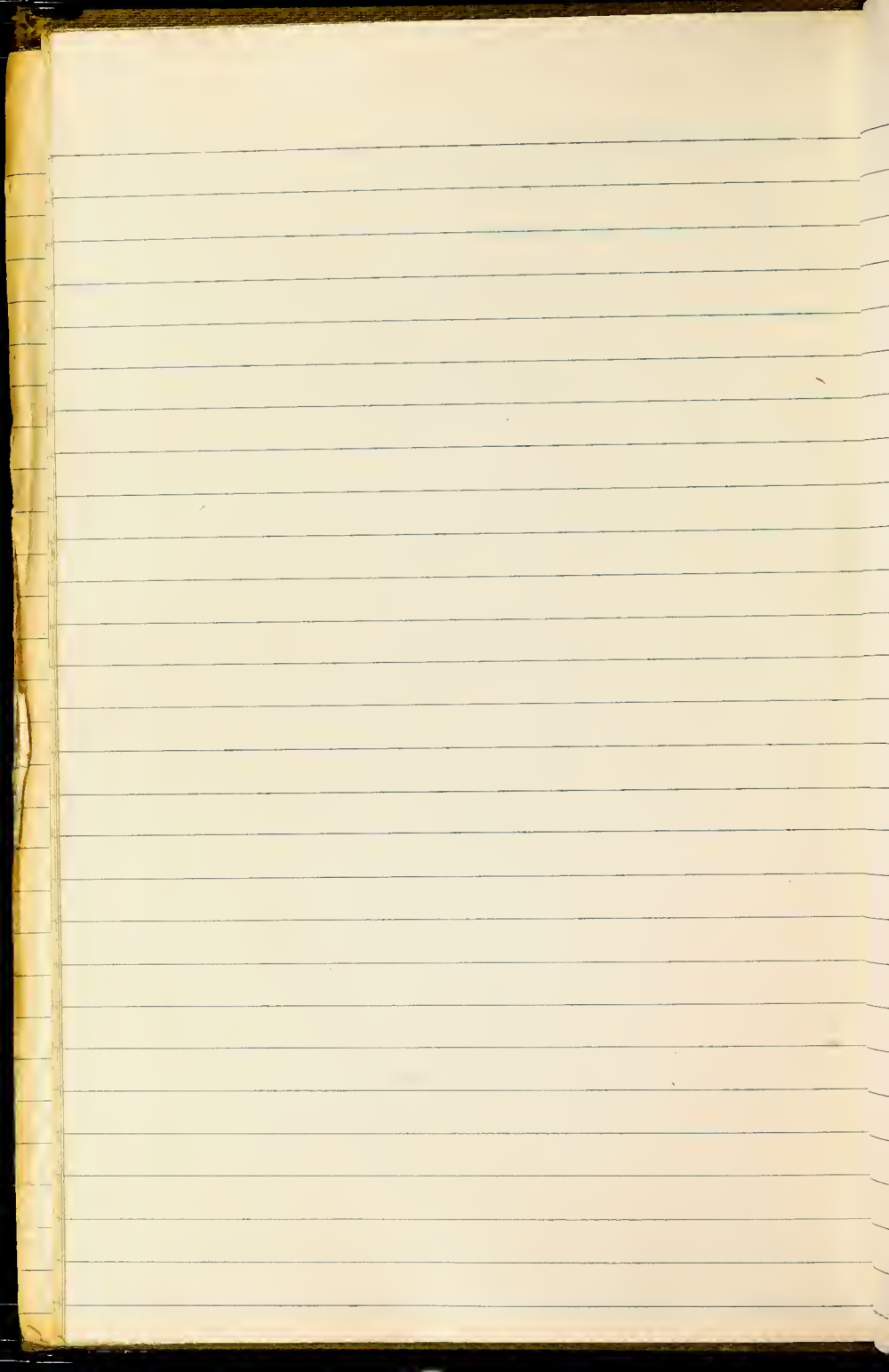
Phellodendron
Hedericaria javanica

Corn alba

1/2









Zabunon of
Vernica Zellheim
Selleheim

Bot. Garden of Batavia
Sci Zabunon
Special need is Flours

Intermt Intermt Fl.

send reports for a check

100

